

## **REMARKS**

The disclosure was objected to. The drawings were objected to. Claims 1-33 were presented for examination. Claims 1-33 were rejected. Applicant thanks Examiner for examination.

Applicant is hereby amending the specification. Applicant is hereby amending FIGS. 5A, 6, and 7. Applicant is hereby amending claims 2 and 31. Applicant also hereby adds claims 34 and 35. Applicant respectfully requests reconsideration of this application as amended, and allowance of claims 1-35.

The amendments to the specification, drawings and claims and new claims add no new matter. Further, claim 2 was amended merely to correct a grammatical error, and thus, is not a narrowing amendment for the purposes of patentability.

### **I. OBJECTION TO DISCLOSURE**

On page 1, Examiner objected to the specification because Applicant's address and citizenship should not be part of the specification. The specification has been amended to delete Applicant's address and citizenship. Therefore, Applicant submits that the specification should no longer be objected to.

### **II. OBJECTIONS TO DRAWINGS**

On page 2, Examiner objects to the drawings, specifically FIGS. 5A, 6, and 7, under 37 CFR §1.83(a) because they fail to show structural features directed to the claimed invention as described in the specification. Furthermore, Examiner requires new drawings for FIGS. 5A, 6, and 7 because these figures have darkened blocks. Applicant has herein submitted replacement drawings for FIGS. 5A, 6, and 7. More particularly, the

replacement drawings are the same as the originally filed drawings, except that the darkened blocks in the original drawings are lightened in the replacement drawings so that their internal structure is more visible. As a result, the replacement drawings more clearly show the structural features directed to various aspects of the claimed invention as described in the specification. Since the structural features were visible in the original drawings and were also described in the text, no new matter has been added to the drawings. Therefore, Applicant respectfully submits that FIGS. 5A, 6, and 7 should no longer be objected to.

### **III. REJECTIONS UNDER 35 USC §112(2)**

On page 3, Examiner rejects claims 23, 24, 26, and 28 under 35 USC §112(2) as being indefinite for failing to particularly point out and distinctly claim the invention. For example, Examiner states that the method of claim 23 recites an apparatus (i.e., “a hardwire connection”). Applicant traverses this rejection. Claim 23 depends from independent method claim 16 and is directed toward a method with several steps. Claim 23 is a further limitation of claim 16 since claim 23 requires that certain steps be implemented in a specific way by using a specific apparatus. Specifically, the steps of “connecting...plurality of connections” in claim 16 is limited to “connecting...plurality of hardwired connections” in claim 23. The same argument holds for claims 24, 26, and 28 (e.g., claim 24 modifies the connecting step of claim 16 by reciting types of controllers used in the connection step). Because claims 23, 24, 26, and 28 are properly drafted to particularly point out and distinctly claim the invention, Applicant submits that these claims are sufficient under 35 USC §112(2).

#### **IV. REJECTIONS UNDER 35 USC §101**

On page 3, Examiner also rejects claims 23, 24, 26, and 28 under 35 USC §101 as being directed to non-statutory subject matter for reciting both method steps and apparatus limitation. Applicant notes that each of these claims clearly indicate that they are directed towards a method (i.e., “The method of claim...”). As discussed above, the dependent claims merely modify the steps recited of their base claims.

#### **V. REJECTIONS UNDER 35 USC §102(e)**

##### **A. Shideler**

On page 4, Examiner also rejects independent claims 1 and 16, and related dependent claims, under 35 USC §102(e) over U.S. Patent No. 6,625,163 issued to Shideler *et al.* (“Shideler”). Applicant respectfully traverses this rejection.

Claims 1 and 16 both recite the use of a controller connected by dedicated connections to a plurality of peripheral cards. In contrast, Shideler discloses a controller module connected by a bus to application modules. Thus, while claims 1 and 16 provide a dedicated connection to the controller, Shideler discloses a shared connection to the controller module.

More specifically, claims 1 and 16 are direct towards a radially distributed serial control bus architecture. The architecture includes a controller connected to the first end of a plurality of connections. It further includes “a plurality of peripheral cards each peripheral card individually coupled to a second end of a respective dedicated one of said plurality of connections.” Advantageously, the architecture provides a point-to-point control communication, as can be used to isolate faults of a particular peripheral card.

For example, in the embodiment of claim 2, the peripheral cards include a transmit connection and a collision connection. The architecture in claim 1 uses dedicated connections.

By contrast, Shideler discloses a shared connection between a controller module and application modules. In the short passage cited by Examiner, Shideler discloses that a controller module is connected to the application modules, but does not disclose whether the connection is shared or dedicated. But as shown in FIG. 3, two application modules 306 and 307 share a common connection to the controller module via a shared connection, HDAC A/B COL 315. Indeed, as further stated in Shideler, “[t]he link from the controller module to the application modules is a point to multi-point link. The link from the application modules to the controller module is a multi-point to point link.” Shideler 8:15-19. Thus, Shideler discloses a shared connection between a controller module and application modules.

Shideler does not disclose or suggest dedicated connections between a controller and a plurality of peripheral cards as recited in claims 1 and 16. Whereas claims 1 and 16 recite a plurality of connections coupled to the controller, Shideler only has a single link to the controller. Since there is no plurality of connections, it follows that Shideler does not disclose a plurality of peripheral cards individually coupled to the plurality of connections as recited in claims 1 and 16. The shared bus connection in Shideler is a different architecture that is incapable of providing the advantages of the invention as claimed.

Therefore, Applicant submits that claims 1 and 16 are patentable over Shideler. Because claims 2-15, and claims 17-30 depend from Shideler in addition to reciting

additional patentable features, these claims are also patentable. For example, claims 2 and 17 recite a peripheral card with a dedicated transmit connection and separate collision connection, which is not taught or suggested by Shideler.

B. Wight

On page 4, Examiner also rejects independent claim 31, and related dependent claims, under 35 USC §102(e) over U.S. Patent No. 6,219,353 issued to Wight *et al.* (“Wight”). Applicant respectfully traverses this rejection.

Claim 31, as amended, recites initiating a fault isolation process in response to a data communication bus failure. In contrast, Wight discloses mere observance of a clock signal on a node to detect a failure of a hub, or plane. Thus, while claim 31 concerns active fault isolation by a centralized controller, Wight only discloses passive fault observance by distributed nodes.

In particular, claim 31 is directed towards a method of fault isolation in a serial control bus architecture by, in part, “performing a control bus integrity check” responsive to “a signal communication failure on a data control bus.” One advantage is that, in a bussed communication architecture, a fault can be isolated to a particular peripheral device.

Wight merely discloses fault observance of a hub by a distributed node. Examiner cites a passage stating that, “[a] node detects that a plane has failed or is inactive when the Hub\_Clock signal is not present or is running at a reduce frequency.” Wight 7:11-13. In FIG. 4, Wight illustrates the centralized hub 30 with data lines between each node 32, 34 and the centralized hub 30. Furthermore, FIG. 4 shows a clock signal 36 traveling from the hub 30 to the nodes 32, 34.

However, Wight fails to teach or disclose fault isolation as recited in claim 31.

Whereas claim 31 isolates faults to a particular peripheral device, Wight discloses distributed nodes that only observe a failure of a centralized hub by clock signals flowing from the hub to the nodes. Wight is passive because the check and failure are one in the same, i.e., abnormalities of the clock signal. Thus, Wight's hub is unable to actively isolate failures in particular nodes. Furthermore, while claim 31 distinguishes one peripheral device from another, the nodes in Wight have only a single input from the hub and are ignorant of how other nodes are operating. Thus, it is impossible to replicate the features of claim 31 according to the disclosure of Wight.

Therefore, Applicant submits that claim 31 is patentable over Wight. Because claims 32-33 depend from independent claim 31, in addition to reciting additional patentable features, these claims are also patentable. For example, claims 32 detects communication failure with a system controller request or background poll.

CONCLUSION

In sum, Applicant respectfully submits that claims 1-35, as presented herein, are patentably distinguishable over the applied prior art, and the other prior art of record. Thus, Applicant believes that the application is in condition for allowance of all claims herein, and therefore, respectfully requests a Notice of Allowance.

In addition, Applicant invites Examiner to contact Applicant's representative at the number provided below if Examiner believes it will help expedite furtherance of this application.

Respectfully submitted,

ANTHONY WILLIAM JORGENSEN

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By: Dorian Cartwright

Dorian Cartwright  
Attorney for Applicant  
Registration No. 53,853

Fenwick & West LLP  
Silicon Valley Center  
801 California Street  
Mountain View, CA 94041  
(650) 335-7823 (Tel)  
(650) 938-5200 (Fax)